# Appendix B Consultation Letters and Responses\*

\*Note: Response from USFWS from initial correspondence pending review of EIS.



April 28, 2004

Brian McDonald The West Virginia Natural Heritage Program P.O. Box 67 Elkins, WV 26241

RE: Environmental Impact Statement (EIS), Western Greenbrier Co-Gen, LLC, Co-Production Facility

Dear Mr. McDonald:

Potomac-Hudson Engineering, Inc. (PHE) is supporting the U.S. Department of Energy (DOE) in preparing an Environmental Impact Statement (EIS) for a Co-Production Facility that would be sited in Rainelle, Greenbrier County, West Virginia. The proposed facility would be constructed and operated by Western Greenbrier Co-Gen, LLC (WGC), with DOE providing financial support through a 5-year cooperative agreement with WGC under the DOE Clean Coal Power Initiative (CCPI) Program. The facility would be designed for long-term commercial operation (at least 20 years) following completion of the cooperative agreement. DOE's support would amount to 50% (approximately \$107.5 million) of the development cost for the proposed facility.

This letter is being submitted to your office to solicit your input on the project. To assist us in assessing any potential environmental impacts of this project, we are requesting a list of any existing or proposed federally protected and special status species for Greenbrier County, as well any site-specific information for the areas indicated on the enclosed maps. Primary local impacts to biological resources are expected to be related to site development and other land-disturbing activities from the project (see below for project description).

#### Proposed Co-Production Facility and Related Actions

WGC is proposing to design, construct, and operate an 85 MW ACFB power plant that would generate electricity and steam by burning approximately 1,800 tons per day (tpd) of waste coal as the primary fuel. The power plant would be located on a 26-acre site immediately to the south of Sewell Creek and the City limits of Rainelle. Material handling and other support facilities would be located on properties to the north of Sewell Creek adjacent to a currently undeveloped industrial park (the Eco Park). A coal-fired rotary kiln associated with the power plant would combine coal ash and limestone into a cement-like material for use with wood wastes to manufacture structural building blocks (Woodbrik<sup>TM</sup>). Currently, it is anticipated that the Woodbrik<sup>TM</sup> manufacturing plant would be located on the north side of Sewell Creek adjacent to the Eco Park. The power plant would likely serve as the anchor for future tenants at the Eco Park by providing a source of steam and hot water supply for building heating and other industrial activities.

Waste coal would initially be obtained from waste coal piles located at Anjean (see attached figures). Excess combustion ash not needed for Woodbrik<sup>TM</sup> manufacture would be used to remediate acid drainage from the source waste coal piles. WGC is in the process of determining additional waste coal

CORPORATE OFFICE

4833 RUGBY AVENUE, SUITE 100 BETHESDA, MD 20814 T 301 907 9078 F 301 907 3446 WWW.PHE.COM
OTHER LOCATIONS IN
CALIFORNIA
NEW JERSEY
NORTH CAROLINA

# POTOMAC-HUDSON ENGINEERING, INC. ENGINEERS = SCIENTISTS = PLANNERS



pile sites for obtaining fuel source once the Anjean piles are depleted (currently estimated at 6 to 7 years). Generally, future waste coal pile sites that would be used would be within 20 to 30 miles of the power plant site. Both rail and truck are being considered as transportation options for the waste coal fuel, raw materials (e.g., limestone), and waste removal.

Additional components of the proposed project, as indicated on the enclosed maps, include the construction of power lines, the extension of a steam line to Georgia Pacific Lumber, and construction of reclaimed water supply line from the Rainelle sewage treatment plant. A combination of groundwater and reclaimed wastewater would be used for supplying water to the plant. It is anticipated that the steam and water lines will be constructed along existing railroad right-of-ways.

In addition, due to the nature of the proposed facility and associated air emissions with the operation, we are also considering the potential for regional-level impacts. Therefore, we are requesting information on protected and special status species and habitats for counties within a 30-mile radius of the proposed project site that may be sensitive to changes in atmospheric conditions. These counties include:

- Nicholas
- Fayette
- Summers
- Raleigh
- Monroe
- Webster, and
- Pocahontas

We are very interested in receiving your comments on the proposal and instructions for any further coordination. If you have any questions, please do not hesitate to call.

Sincerely,

Fred Carey, P.E. Project Manager

Attachments:
General Location Map
Topographic Map of Proposed Power Plant Site
Aerial Photograph of Proposed Power Plant Site
Topographic Map of Anjean
Aerial Photograph of Anjean



July 20, 2004

Mr. Mark L. McKoy US DOE 3610 Collins Ferry Road P.O. Box 880 Morgantown, WV 26507

RE: Western Greenbrier County Production Project

FR#. 04-705-GB1

Dear Mr. McKoy:

We have reviewed the above mentioned project to determine its effects to cultural resources. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

The West Virginia State Historic Preservation Office has reviewed the proposed project to construct a power plant on the site of the former Meadow River Lumber Company at Rainelle, Circenbrier County. Thank you for meeting with us on May 12, 2004 to discuss options to decide a plan of action in order to make the power plant construction have as little an effect on cultural resources as possible. It is our understanding that the following is already within your scope of work and that you would like the West Virginia State Historic Preservation Office to decide what other additional actions must be performed to record cultural resources that may be effected by this project.

#### Actions contained within existing scope of work:

- Perform research on architectural history and archaeological sites using maps, documents, and reports at the West Virginia Division of Culture and History.
- Review of materials at local libraries, historical societies, and museums.
- Coordination with relevant government agencies.
- Walkover survey of the proposed 26-acre power plant site, power line corridors, rail spur corridors and access roads.
- Windshield survey and brief walkover survey of the Anjean and Nettie coal waste sites (or other designated waste site localities, assuming each locality is approximately 200 acres).
- Review of historical map data, various files and records, and field observation to assess the potential for the study areas to contain historic buildings and structures.
- Review of geomorphological data, land-use history, historic map data, and field observations to assess the
  potential of areas to contain subsurface artifacts.
- Review of various aspects of the project to consider the potential for the project to impact significant cultural resources.
- Suggest mitigation options for any significant impacts that might arise from the proposed project.

#### Additional Work the West Virginia State Historic Preservation Office will require:

We would like to have the following additional work added to the current scope of work for the draft Environmental Impact Statement (EIS):

A map showing district boundaries and potentially historic properties (excluding individual company houses but including more significant structures) would be created. Photos and information could be keyed to the electronic version of the map. We are of the opinion that the company houses are as significant as any of the other structures and would require them to be mapped as well.

THE CULTURAL CENTER • 1900 KANAWHA BOULEVARD, EAST • CHARLESTON, WEST VIRGINIA 25305-0300 TELEPHONE 304-558-0220 • FAX 304-558-2779 • TDD 304-558-3562 EEO/AA EMPLOYER Mr. McKoy July 20, 2004 Page 2

Renderings made of the affected views (visualizations) from selected properties.

Detailed design plans for the proposed project showing building placement, elevations, access roads, etc....

A Phase I archaeological survey be conducted within high-probability areas along the selected corridor for the steam and water-supply pipelines as well as the excavation of one or more backhoe trenches in high probability areas that have been identified where there would be ground disturbance by the project. Phase I archaeological testing of the benches (designated a relatively undisturbed during walkover survey) located south of fence line in the Sewell Creek area. Phase I archaeological survey at the location where the footers for the stack and building are being placed.

A screening archaeological survey be conducted to identify high-probability areas within any new park land

acquired by the city as part of a land exchange with Western Greenbrier Co-Gen., LLC.

Results of the walkover survey of the Anjean and Nettie coal waste sites were presented at the May 12,
 2004 meeting held at our office. Information submitted for review indicates that snow cover restricted access to some portions of the project area. Have these areas subsequently been survey?

Submission of copies of reports, maps, and special computer files created as part of the project's cultural

resources impact assessment.

Submission of a map illustrating areas of disturbance within the proposed project area.

We look forward to receiving the draft Environmental Impact Statement. We will complete our review upon receipt of the materials requested.

We appreciate the opportunity to be of service. If you have questions regarding our comments or the Section 106 process, please contact Ryan Burns, Historian or Carolyn Kender, Archaeologist, in the Historia Preservation Office at (304) 558-0240.

Sincerely,

Jangafer W. Murdock

Program Coordinator for Review and Compliance

JWM:cmk/rb



## U.S. Department of Energy



## National Energy Technology Laboratory

May 20, 2005

Ms. Jennifer W. Murdock Program Coordinator for Review and Compliance West Virginia Division of Culture and History The Cultural Center 1900 Kanawha Blvd., E. Charleston, WV 25305-0300

Dear Ms. Murdock:

Thank you for your letter of July 20, 2004 to Mr. Mark McKoy, in which you indicate additional work the West Virginia State Historic Preservation Office will require for the Western Greenbrier Co-Gen Project in Greenbrier County. Enclosed please find the following reports which were developed to address your comments: (1) Historic Resources Determination of Eligibility and Assessment of Effect; and (2) Phase I Archeological and Geomorphological Investigations. Specific items you indicated should be addressed in the draft Environmental Impact Statement and their current status are listed below.

#### Items included in the Historic Resources Determination of Eligibility and Assessment of Effect report:

- A map showing distinct boundaries and potentially historic properties
- Renderings made of the affected views from selected properties

#### Items included in the Phase I Archeological and Geomorphological Investigations report:

- Phase I archaeological surveys within high-probability areas
- Screening archaeological surveys
- Results of the walkover survey of the Anjean and Nettie coal waste sites Nettie is no longer under consideration for the project. Walkover surveys of Anjean were conducted in April 2004.
- Submission of a map illustrating areas of disturbance within the proposed project area

#### Additional Items

- Detailed design plans for the proposed project Design iterations for the facility are on-going and the latest version of the site layout will be presented in the DEIS; however, the enclosed reports indicate the boundary limits within which land-disturbing activities would be expected to take place.
- Submission of copies of reports, maps, and computer files Reports and maps are enclosed with this letter.
   GIS data sets have been developed that contain aerial mapping and historic district boundaries. This information can be made available to your office upon request of a specific data format, and after completion of the DEIS.

We look forward to your review comments of the materials presented. Should questions or additional comments arise, please contact Mr. Mark McKoy at 304-285-4426, Mark.McKoy@netl.doe.gov, or me at the Morgantown Office numbers or address listed below.

Sincerely,

Roy G. Spears Environment, Safety, and Health Division

Enclosures

Historic Resources Determination of Eligibility and Assessment of Effects Phase I Archeological and Geomorphological Investigations



WEST VIRGINIA DIVISION OF CULTURE & HISTORY

1900 Kanawha Blvd., E. Charleston, WV 25305-0300

Phone 304.558,0220 Fax 304.558.2779 TDD 304.558.3562 www.wvculture.org EEO/AA Employer

July 5, 2005

Mr. Roy G. Spears US Department of Energy 3610 Collins Ferry Road P.O. Box 880 Morgantown, WV 26507

Western Greenbrier County Production Project RE:

04-705-GB-2 FR#:

Dear Mr. Spears:

We have reviewed the additional information submitted for the above referenced project to determine its effects to cultural resources. As required by Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

Architectural Resources:

The West Virginia State Historic Preservation Office has reviewed Historic Resources Determination of Eligibility and Assessment of Effects West Greenbrier Co-Production Demonstration Project Greenbrier County West Virginia for impacts to architectural resources. Unfortunately, we cannot complete our review with the materials submitted. The information submitted is very useful for the completion of the Section 106 review process. Although your report concludes that the proposed stack will have no adverse effect on the historic districts; it does not indicate if the public have commented upon this obvious visual intrusion. Consideration of public comment is also a part of the review process; therefore, we request that public comment be sought through a public meeting to be held in Rainelle regarding the proposed changes to the view shed. We also ask that the Greenbrier County Historical Society be contacted and given both the architectural and archaeological reports for their comment on the proposed plant. Their address is as follows:

> Greenbrier County Historical Society 301 West Washington Street Lewisburg, WV 24901

We ask that our office be notified when the public meeting will be held at least two weeks in advance in order to give a representative from this office the opportunity to attend. Finally, please submit comments from the Greenbrier County Historical Society to this office for our review. We will complete our review upon receipt of the materials requested.

Mr. Spears July 5, 2005 FR# 04-705-GB-2 Page 2

Archaeological Resources:

We have reviewed the report, "Phase I Archaeological and Geomorphological Investigations of the Proposed Western Greenbrier Co-Production Plant, Rainelle, Greenbrier County, West Virginia." The report satisfactorily addresses our concerns regarding the presence of archaeological sites within the project area. It is our understanding that, by the time Stage 2 of the Phase I survey was conducted in November 2004, several changes had occurred to the project designs and that the following areas were included in the survey: high probability areas within the potential plant site (terraces and benches located between Sewell Creek and a ridge to the east); benches in the Plum Creek tract south of the property fence line; the steam/water pipeline corridor; and the 17-acre exchange property. Field methodology included pedestrian survey, excavation of systematic and judgmental shovel probes, and deep testing. The survey did not result in the identification of previously unknown archaeological resources. With the exception of the steam/water pipeline corridor between shovel probes 4 and 6, it is recommended that the proposed project will have no effect to archaeological sites that are eligible for or included in the National Register of Historic Places. We concur with that recommendation.

A portion of the steam/water pipeline corridor crosses an area with a high potential to contain archaeological resources. At the time of the survey, the pipeline corridor had not been finalized. Therefore it is recommended that the section of the proposed pipeline corridor between shovel probes 4 and 6 be further investigated with an intensive Phase I survey once the corridor has been determined. We concur with that recommendation. We ask to be notified should the project plans change further so that we can assess the potential for those changes to affect cultural resources.

We appreciate the opportunity to be of service. If you have questions regarding our comments or the Section 106 process, please contact Lora A Lamarre, Senior Archaeologist, or Ryan Burns, Historian, at (304) 558-0240.

Deputy State Historic Preservation Officer

usan merce

SMP/LAL/RCB

Greenbrier County Historical Society CC:

August 01, 2005

Greenbrier County Historical Society 301 West Washington Street Lewisburg, WV 24901

RE: Environmental Impact Statement (EIS), Western Greenbrier Co-Gen, LLC, Co-Production Facility

To Whom It May Concern:

Potomac-Hudson Engineering, Inc. (PHE) is supporting the U.S. Department of Energy (DOE) in preparing an Environmental Impact Statement (EIS) for a Co-Production Facility that would be sited in Rainelle, Greenbrier County, West Virginia. The proposed facility would be constructed and operated by Western Greenbrier Co-Gen, LLC (WGC), with DOE providing financial support through a 5-year cooperative agreement with WGC under the DOE Clean Coal Power Initiative (CCPI) Program.

In compliance with Section 106 of the National Historic Preservation Act, and to support the preparation of the EIS, the following reports have been prepared:

- (1) Historic Resources Determination of Eligibility and Assessment of Effects West Greenbrier Co-Production Demonstration Project Greenbrier County West Virginia
- (2) Phase I Archaeological and Geomorphological Investigations of the Proposed Western Greenbrier Co-Production Plant, Rainelle, Greenbrier County, West Virginia,

The West Virginia State Historic Preservation Office (SHPO) has reviewed and commented on these reports and has requested that we directly solicit your comments. Therefore, we have enclosed a copy of each report for your review. It is anticipated that a Draft EIS will be distributed to the public sometime later this year, at which point a Public Meeting will be held in the Rainelle area. The Greenbrier County Historical Society will be included on the EIS mailing list and notified of any public meetings related to the EIS.

If you have any questions, please do not hesitate to call. We look forward to your input.

Sincerely,

Fred Carey, P.E. Project Manager

#### Attachments:

- -Historic assessment report: Historic Resources Determination of Eligibility and Assessment of Effects West Greenbrier Co-Production Demonstration Project Greenbrier County West Virginia
- -Archeological assessment report: Phase I Archaeological and Geomorphological Investigations of the Proposed Western Greenbrier Co-Production Plant, Rainelle, Greenbrier County, West Virginia

April 27, 2004

U.S. Fish and Wildlife Service Route 250 South, Elkins Shopping Plaza 694 Beverly Pike Elkins, WV 26241

RE: Environmental Impact Statement (EIS), Western Greenbrier Co-Gen, LLC, Co-Production Facility

Dear Sir or Madam:

Potomac-Hudson Engineering, Inc. (PHE) is supporting the U.S. Department of Energy (DOE) in preparing an Environmental Impact Statement (EIS) for a Co-Production Facility that would be sited in Rainelle, Greenbrier County, West Virginia. The proposed facility would be constructed and operated by Western Greenbrier Co-Gen, LLC (WGC), with DOE providing financial support through a 5-year cooperative agreement with WGC under the DOE Clean Coal Power Initiative (CCPI) Program. The facility would be designed for long-term commercial operation (at least 20 years) following completion of the cooperative agreement. DOE's support would amount to 50% (approximately \$107.5 million) of the development cost for the proposed facility.

This letter is being submitted to your office to initiate the consultation process under Section 7 of the Endangered Species Act and to solicit your input on the project. To assist us in assessing any potential environmental impacts of this project, we are requesting a list of any existing or proposed federally protected and special status species for Greenbrier County, as well any site-specific information for the areas indicated on the enclosed maps. Primary local impacts to biological resources are expected to be related to site development and other land-disturbing activities from the project (see below for project description).

#### Proposed Co-Production Facility and Related Actions

WGC is proposing to design, construct, and operate an 85 MW ACFB power plant that would generate electricity and steam by burning approximately 1,800 tons per day (tpd) of waste coal as the primary fuel. The power plant would be located on a 26-acre site immediately to the south of Sewell Creek and the City limits of Rainelle. Material handling and other support facilities would be located on properties to the north of Sewell Creek adjacent to a currently undeveloped industrial park (the Eco Park). A coal-fired rotary kiln associated with the power plant would combine coal ash and limestone into a cement-like material for use with wood wastes to manufacture structural building blocks (Woodbrik<sup>TM</sup>). Currently, it is anticipated that the Woodbrik<sup>TM</sup> manufacturing plant would be located on the north side of Sewell Creek adjacent to the Eco Park. The power plant would likely serve as the anchor for future tenants at the Eco Park by providing a source of steam and hot water supply for building heating and other industrial activities.

Waste coal would initially be obtained from waste coal piles located at Anjean (see attached figures). Excess combustion ash not needed for Woodbrik<sup>TM</sup> manufacture would be used to remediate acid drainage from the source waste coal piles. WGC is in the process of determining additional waste coal

# POTOMAC-HUDSON ENGINEERING, INC. ENGINEERS = SCIENTISTS = PLANNERS



pile sites for obtaining fuel source once the Anjean piles are depleted (currently estimated at 6 to 7 years). Generally, future waste coal pile sites that would be used would be within 20 to 30 miles of the power plant site. Both rail and truck are being considered as transportation options for the waste coal fuel, raw materials (e.g., limestone), and waste removal.

Additional components of the proposed project, as indicated on the enclosed maps, include the construction of power lines, the extension of a steam line to Georgia Pacific Lumber, and construction of reclaimed water supply line from the Rainelle sewage treatment plant. A combination of groundwater and reclaimed wastewater would be used for supplying water to the plant. It is anticipated that the steam and water lines will be constructed along existing railroad right-of-ways.

In addition, due to the nature of the proposed facility and associated air emissions with the operation, we are also considering the potential for regional-level impacts. Therefore, we are requesting information on protected and special status species and habitats for counties within a 30-mile radius of the proposed project site that may be sensitive to changes in atmospheric conditions. These counties include:

- Nicholas
- Fayette
- Summers
- Raleigh
- Monroe
- Webster, and
- Pocahontas

We are very interested in receiving your comments on the proposal and instructions for any further coordination. If you have any questions, please do not hesitate to call.

Sincerely,

Project Manager

Attachments:

General Location Map
Topographic Map of Proposed Power Plant Site
Aerial Photograph of Proposed Power Plant Site
Topographic Map of Anjean
Aerial Photograph of Anjean



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE



West Virginia Field Office 694 Beverley Pike Elkins, West Virginia 26241

July 8, 2004

Mr. Fred Carey, P.E.
Project Manager
Potomac-Hudson Engineering, Inc.
4833 Rugby Avenue, Suite 100
Bethesda, Maryland 20814

Re:

Environmental Impact Statement, Western Greenbrier Co-Gen, LLC, Co-Production Facility, Greenbrier County, West Virginia

Dear Mr. Carey:

This responds to your information request of 27 April 2004 regarding the potential impacts of a proposed project on federally listed endangered and threatened species and species of concern. Western Greenbrier Co-Gen, LLC, proposes to design, construct and operate an 85 MW ACFB power plant, which will burn 1,800 tons per day of waste coal for the generation of electricity and steam. The selected area is a 26-acre site near the town of Rainelle, in Greenbrier County, West Virginia. The initial site for acquiring waste coal is near Anjean, West Virginia.

Potomac-Hudson Engineering has requested impacts from this project on any endangered or threatened species within a 30-mile radius from the site for the preparation of an Environmental Impact Statement (EIS). This distance is requested due to the possible changes in atmospheric conditions that may occur from this power plant. These comments are provided pursuant to the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and the Fish and Wildlife Coordination Act (16 U.S.C. 661-667e).

#### Fish and Wildlife Surveys and Investigations

For the purposes of this report, impacts to federally listed endangered and threatened species have been separated into two different categories: (1) Site Specific Impacts, and (2) 30-Mile Radius Impacts. In addition, other impacts to fish and wildlife have been provided and are listed under the category: (3) Other Impacts.

#### (1) Site Specific Impacts:

Certain impacts can be attributed to the actual construction of the power plant and the associated features (rail-way, transmission lines, etc.). A check of our records indicate that only one federally listed species could occur in the project area, the endangered Indiana bat, <u>Myotis</u> sodalis.

The federally listed endangered Indiana bat may occur in the project area and could conceivably be adversely affected by the project proposal. The Indiana bat may use the project area for foraging and roosting between April 1 and November 15. Indiana bat summer foraging habitats are generally defined as riparian, bottomland, or upland forest, and old fields or pastures with scattered trees. Roosting/maternity habitat consists primarily of live or dead hardwood tree species, which have exfoliating bark that provides space for bats to roost between the bark and the bole of the tree. Tree cavities, crevices, splits, or hollow portions of tree boles and limbs also provide roost sites.

The U.S. Fish and Wildlife Service (Service) has determined the number of acres of suitable foraging and roosting habitat on the West Virginia landscape available to each Indiana bat, versus the total acreage of forest. On that basis, we have determined that small projects, outside of a five-mile radius of a hibernaculum and a two-mile radius of a capture site, affecting 17 acres or less of suitable forested habitat, will have a very small chance of resulting in direct or indirect take of the species, and therefore these effects are considered discountable.

If less than 17 acres of potential habitat for that species will be impacted, then no further consultation under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) is required regarding the Indiana bat on a site-specific impact. Should project plans change, or if additional information on the Indiana bat becomes available, this determination may be reconsidered. If more than 17 acres of forested habitat will be impacted, further coordination with this office will be required for this site-specific concern.

#### (2) 30-mile radius impacts:

Several endangered and threatened species occur within the 30-mile radius from the proposed project site. They include the Indiana bat (<u>Myotis sodalis</u>), the Virginia big-eared bat (<u>Corynorhinus townsendii virginianus</u>), Virginia spiraea (<u>Spiraea virginiana</u>), the West Virginia Northern flying squirrel (<u>Glaucomys sabrinus fuscus</u>), small whorled pogonia (<u>Isotria medeoloides</u>), running buffalo clover (<u>Trifolium stoloniferum</u>), the northern riffleshell mussel (<u>Epioblasma torulosa rangiana</u>), the pink mucket pearly mussel (<u>Lampsilis abrupta</u>), and the fanshell mussel (<u>Cyprogenia stegaria</u>).

While the Service commends the energy community for providing lower emission power plants, federally protected species (as listed above) could be sensitive to even slight changes in atmospheric conditions. For example, the endangered West Virginia Northern flying squirrel is dependant upon a specific habitat type. Potential habitat for the West Virginia northern flying squirrel is defined as high elevation northern hardwood forest with a conifer component, usually of red spruce or hemlock. Other parameters indicative of potential habitat include abundant

large woody debris on the forest floor, cooler temperatures and higher humidity that promotes lichen growth and presence of moss, fern, liverwort or clubmoss groundcover. The cumulative effects from acid deposition may have a detrimental impact upon this type of habitat (especially those found in higher elevations and colder temperature regimes).

In addition, the three protected mussels species found within the 30-mile radius may show detrimental effects to changes in stream water pH and metal accumulation (aluminum, mercury, etc.) through contaminated rain and snowfall. Federally listed plants could also become indirectly impacted through acid deposition on soils, which may change the nutrient composition of the soils (calcium depletion, increasing sulfur and nitrogen, etc.).

Projected emissions were not included within your letter. Accurate emission figures, coupled with anticipated deposition rates, historical wind currents and rainfall amounts are necessary to determine environmental (and species specific) changes through atmospheric deposition (via modeling). Until this is complete, we cannot determine the long-range impact to listed species.

#### (3) Other Impacts:

Of particular concern are impacts to other fish and wildlife resources that stem from the storage and disposal of waste materials generated at coal burning plants. This waste material is generally composed of noncombustible materials (minerals) and can be either collected within the flue stacks (fly ash) or as heavier bottom ash. Your letter states that the Woodbrik manufacturing plant will use a portion of this ash (along with other materials) in the construction of bricks. Your letter goes on to state that excess ash will also be used to remediate acid mine drainage (AMD) from the source waste coal piles. The Service not only recognizes the problems in water quality associated with AMD, but also the potential for ash to release high levels toxic metals within the stream environment. The Service cannot recommend trading one environmental problem for another, potentially more serious one. Therefore the Service recommends a proper study of the composition of the ash to be used, as well as the expected dissolution of toxic metals within the downstream environment and all associated cumulative health risks to fish and wildlife. Alternate disposal areas should also be considered in order to minimize any potential risks to water quality.

Typically, power plants discharge water at permitted sites covered under the National Pollutant Discharge Elimination System (NPDES) permitting procedures. While your letter states that the power plant will provide hot water and steam for nearby businesses, it is not clear if all waste water will be processed in this manner or if some portion will be discharged into the environment. Discharged water may contain biocides and other additives used to control algae and bacteria within the power plant lines. This, as well as the extreme temperatures may be harmful to surface and groundwater quality. Possible discharge sites should be explored in order to provide for the least damaging alternative.

#### Conclusion

Overall, the purpose of this project remains unclear. There was no indication within your letter that the construction of this power plant would alleviate a power deficiency within West

Virginia. In fact, your letter does not mention any type of alternatives that have been considered prior to the preparation of an EIS or the implementation of the National Environmental Policy Act (NEPA) process. The NEPA process should assist with the procedures of choosing the appropriate alternative, instead of supporting the choice made prior to the NEPA implementation. With this in mind, alternate locations should be considered so that those who benefit from the electricity generated from this plant would also be responsible for the proper disposal and control of the inherent pollution.

If you have any questions regarding this letter, please contact Mr. Monte Matthews of my staff at (304) 636-6586, or at the letterhead address.

Sincerety,

fhomas R. Chapman

Field Supervisor



#### DIVISION OF NATURAL RESOURCES

Wildlife Resources Section Operations Center P.O. Box 67 Elkins, West Virginia 26241-3235 Telephone (304) 637-0245 Fax (304) 637-0250

Ed Hamrick Director

Bob Wise Governor

May 25, 2004

Mr. Fred Carey Potomac-Hudson Engineering, Inc. 4833 Rugby Avenue, Suite 100 Bethesda, MD 20814

Dear Mr. Carey:

We have reviewed our files for information on rare, threatened, and endangered (RTE) species in the area the proposed Western Greenbrier Co-Gen, LLC Co-Production Facility in Rainelle, Greenbrier County, West Virginia. There are no known occurrences of RTE species at the Rainelle site, nor do we have any known occurrences at the Anjean waste coal piles.

Enclosed is a compact disc containing a list of RTE species currently known from Greenbrier County (GreenbrierCounty.doc), RTE species within a 30-mile radius of Rainelle (RainelleData.xls), and an explanation of our ranking system denoting species rarity (Rankexpl.doc). The table below lists federally protected species within the boundaries of your project description:

Name	Status*	Comments	
Greenbrier County		The same of the sa	
Shale barren rockcress (Arabis serotina)	LE	Restricted to shale barrens of Greenbrier, Hardy, and Pendleton counties.	
Northern flying squirrel (Glaucomys sabrinus fuscus)	LE	Restricted to the higher elevations of the mountain counties (Greenbrier, Pendleton, Pocahontas, Randolph, Tucker, Webster); in areas with red spruce or a conifer component.	
Small-whorled pogonia ( <i>Pogonia</i> medeoloides)	LT	Currently known from only Greenbrier County; does not appear restricted to a specific habitat.	

Indiana hat (Martin 17)	<del></del>	
Indiana bat (Myotis sodalis)	LE	Hibernates in caves in Greenbrier,
		Hardy, Mercer, Monroe, Pendleton,
		Pocahontas, Preston, Randolph, and
		Tucker counties; documented as
		utilizing mine portals in Fayette and
	İ	Raleigh counties as summer roosts;
		also utilizes trees as roosts; suspected
		maternity site in Boone County in
		2003.
Virginia spiraea (Spiraea virginiana)	LT	A riparian shrub known to occur along
		the Bluestone, Greenbrier, Gauley, and
		Meadow rivers; additional non-riparian
		sites in Raleigh County.
		Si County.
30-MILE RADIUS OF RAINELLE		
Shale barren rockcress (Arabis serotina)	LE	See comments above.
Virginia big-eared bat (Corynorhinus	LE	Utilizes caves as hibernacula and
townsendii virginianus)		maternity colonies in Grant, Hardy,
		Pendleton, Preston, Randolph, and
		Tucker counties; utilizes mine portals
		as summer and fall roosts
Fanshell mussel (Cyprogenia stegaria)	LE	Known from the Kanawha River in
, ,		Fayette County and the Ohio River in
		Wood and Jackson counties.
Northern riffleshell (Epioblasma torulosa	LE	Known from the only the Kanawha
rangiana)		River in Fayette and Kanawha
_ :		counties.
Northern flying squirrel (Glaucomys	LE	See comments above.
sabrinus fuscus)	~~	See comments above.
·		
Small-whorled pogonia (Pogonia	LT	See comments above.
medeoloides)		ose somments above.
,		
Pink mucket pearly mussel	LE	Known from the Kanawha River in
•		Fayette and Kanawha counties, and
		the Ohio River in Cabell, Mason, and
		Wood counties.
Indiana bat (Myotis sodalis)	LE	See comments above.
Virginia spiraea (Spiraea virginiana)	LE	See comments above.
Running buffalo clover (Trifolium	LE	
stoloniferum)	LL	Found in disturbed areas in old jeep
		trails, logging roads, skid rows, etc. in
		Barbour, Brooke, Fayette, Pendleton,
		Pocahontas, and Randolph counties;
		historically known from Preston and
wr yr		Webster counties.

<sup>\*</sup>LE = endangered; LT = threatened

This response is based on information currently available and should not be considered a comprehensive survey of the areas under review. We hope you find this information helpful in your planning process.

Enclosed please find an invoice.

Thank you for contacting us and please call if you should have any questions.

Sincerely,

Barbara Sargent

Environmental Resources Specialist

Wildlife Diversity Program

enclosures



#### WEST VIRGINIA

### **Tribal Points of Contact Huntington District**

1) Absentee-Shawnee Tribe of Indians of Oklahoma

2025 S. Gordon Cooper Drive

Shawnee, Oklahoma 74801-9381

Governor: Mr. Kenneth Blanchard

NAGPRA contact: Ms. Jennifer Makaseah, Director, Cultural/Historic Preservation

405-275-4030

2) Cherokee Nation

P.O. Box 948

Tahlequah, Oklahoma 74465

Principal Chief: Mr. Chad Smith

NAGPRA contact: Dr. Richard Allen

918-456-0671

3) Delaware Nation HAS RESPONDED

P.O. Box 825

Anadarko, Oklahoma 73005

President: Mr. Bruce Gonzales

NAGPRPA contact: Ms. Phyllis Wahahrockah-Tasi

405-247-2448

4) Delaware Tribe of Indians | HAS RESPONDED

220 NW Virginia Ave.

Bartlesville, Oklahoma 74003

Chief: Mr. Larry Joe Brooks

NAGPRA contact: Mr. Brice Obermever

918-336-5272

5) Eastern Band of Cherokee Indians of North Carolina

P.O. Box 455

Cherokee, North Carolina 28719

Principal Chief: Ms. Michelle Hicks

NAGPRA contact: Ms. Clara Holt, NAGPRA Officer

THPO/Section 106 contact: Mr. Russell Townsend

828-497-2771

6) Eastern Shawnee Tribe of Oklahoma HAS RESPONDED

P.O. Box 350

Seneca, Missouri 64865

Chief: Mr. Charles Enyart

918-666-2435

7) Shawnee Tribe P.O. Box 189 Miami, Oklahoma 74355 Chairman: Mr. Ron Sparkman

NAGPRA contact: Ms. Rebecca Hawkins, Tribal Administrator

918-542-2441

8) United Keetoowah Band of Cherokee Indians in Oklahoma

P.O. Box 746

Tahlequah, Oklahoma 74465

Chief: Dallas Proctor

NAGPRA contact: Mr. Stephen Mouse, Assistant Chief, 2450 S. Muskcoggee Ave., Tahlequah,

OK 74465 918-431-1818

9) Tuscarora Nation Chief: Mr. Leo R. Henry 2006 Mt. Hope Rd via Lewiston, NY 14092 716-622-7061

10) NAGPRA/106 contact: Mr. Richard Hill (Chairperson on Standing Committee on Burial Rules and Regulations) 2235 Mt. Hope Rd via Sanborn, NY 14123



## U.S. Department of Energy



## National Energy Technology Laboratory

SAMPLE LETTER

July 28, 2004

Jennifer Makaseah, Director, Cultural/Historic Preservation Absentee-Shawnee Tribe of Indians of Oklahoma 2025 S. Gordon Cooper Drive Shawnee, Oklahoma 74801-9381

Re:

Executive Memo (4/29/1994): "Gov't to Gov't Relations", and

Executive Order 13084: Consultation and Coordination with Indian Tribal Gov't,

Section 106 and NAGPRA Consultation for the

Environmental Impact Statement (EIS), Western Greenbrier Co-Gen, LLC, Co-Production Facility,

Rainelle, West Virginia

Dear Ms. Makaseah,

The U.S. Department of Energy (DOE) is preparing an Environmental Impact Statement (EIS) for a Co-Production Facility that would be sited in Rainelle, Greenbrier County, West Virginia. The proposed facility would be constructed and operated by Western Greenbrier Co-Gen, LLC (WGC), with DOE providing financial support through a 5-year cooperative agreement with WGC under the DOE Clean Coal Power Initiative (CCPI) Program. The facility would be designed for long-term commercial operation (at least 20 years) following completion of the cooperative agreement. DOE's support would amount to 50% of the development cost for the proposed facility.

In accordance with the referenced Executive Orders and Acts, the DOE would like to solicit your input on the project in order to determine if your tribe has any concerns or issues about the project. In particular, we are interested in learning whether or not this project has the potential to impact any archeological, religious or cultural sites in the area that are considered significant to your tribe. The DOE is requesting that you (or your designated representative) identify and/or notify my office of any concerns or issues you may have, or if you are aware of any significant archeological, religious, or cultural sites within the areas of potential impact.

To assist in your review, I have enclosed maps that illustrate the areas where construction impacts are likely to occur. Impacts to archeological resources (if present) are expected to be related to site development and other land-disturbing activities from the project. In addition, the potential for impacts related to visual or atmospheric resources associated with potential air emissions are being considered. The following discussion provides a more detailed description of the project.

#### **Proposed Co-Production Facility and Related Actions**

WGC is proposing to design, construct, and operate an 85 MW atmospheric circulating fluidized bed power plant that would generate electricity and steam by burning approximately 1,800 tons per day (tpd) of waste coal as the primary fuel. The power plant would be located on a 26-acre site immediately to the south of Sewell Creek and the City limits of Rainelle. Material handling and other support facilities would be located on properties to the north of Sewell Creek adjacent to a currently undeveloped industrial park (the Eco Park). A coal-fired rotary kiln associated with the

3610 Collins Ferry Road, P.O. Box 880, Morgantown, WV 26507-0880

#### SAMPLE LETTER

power plant would combine coal ash and limestone into a cement-like material for use with wood wastes to manufacture structural building blocks (Woodbrik<sup>TM</sup>). Currently, it is anticipated that the Woodbrik<sup>TM</sup> manufacturing plant would be located on the north side of Sewell Creek adjacent to the Eco Park. The power plant would likely serve as the anchor for future tenants at the Eco Park by providing a source of steam and hot water supply for building heating and other industrial activities.

Waste coal would initially be obtained from waste coal piles located at Anjean (see attached figures). Excess combustion ash not needed for Woodbrik<sup>TM</sup> manufacture would be used to remediate acid drainage from the source waste coal piles. WGC is in the process of determining additional waste coal pile sites for obtaining fuel source once the Anjean piles are depleted (currently estimated at 6 to 7 years). Generally, future waste coal pile sites that would be used would be within 20 to 30 miles of the power plant site. Both rail and truck are being considered as transportation options for the waste coal fuel, raw materials (e.g., limestone), and waste removal.

Additional components of the proposed project, as indicated on the enclosed maps, include the construction of power lines, the extension of a steam line to Georgia Pacific Lumber, and construction of reclaimed water supply line from the Rainelle sewage treatment plant. A combination of groundwater and reclaimed wastewater would be used for supplying water to the plant. It is anticipated that the steam and water lines will be constructed along the banks of Sewell Creek.

We are very interested in receiving your comments or other input you have concerning possible effects of the project on archeological, religious, or cultural sites that are considered significant to your tribe. If you have any questions, please do not hesitate to call.

In addition, please sign the signature line below and return a signed copy to my attention if you (or your designated representative) want to continue to receive information about the project, or if you wish to provide review comments on the Section 106 or NEPA documents.

Sincerely,

Mark L. McKoy NEPA Document Manager U.S. DOE

Attachments:

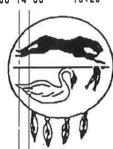
General Location Map

Topographic Map of Proposed Power Plant Site Aerial Photograph of Proposed Power Plant Site

Topographic Map of Anjean Aerial Photograph of Anjean

#### RESPONSE REQUESTED:

Yes, we wish to continue to receive information	on and participate in the consultation process.
No we do not wish to continue to receive info	ormation or participate in the consultation process.
Ву:	
Title:	
Date:	



## EASTERN SHAWNEE TRIBE OF OKLAHOMA

P.O. Box 350 · Seneca, MO 64865 · (918) 666-2435 · FAX (918) 666-2186

August 13, 2004

NETL ATTN: Mark L. McCoy 3610 Collins Ferry Road P.O. Box 880 Morgantown, WV 26507-0880

From-us dept of energy

Re: Western Greenbrier Co-Gen, LLC, Co-Production Facility Rainelle, West Virginia

To Whom It May Concern:

Thank you for notice of the referenced project(s). The Eastern Shawnee Tribe of Oklahoma is currently unaware of any documentation directly linking Indian Religious Sites to the proposed construction. In the event any items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) are discovered during construction, the Eastern Shawnee Tribe request notification and further consultation.

The Eastern Shawnee Tribe has no objection to the proposed construction. However, if any human skeletal remains and/or any objects falling under NAGPRA are uncovered during construction, the construction should stop immediately, and the appropriate persons, including state and tribal NAGPRA representatives contacted.

Sincerely,

Young Beckham

Jo Ann Beckham Administrative Assistant

Charles Enyart, Chief Eastern Shawnee Tribe of Oklahoma



## DELAWARE TRIBE OF INDIANS

220 N.W. VIRGINIA • BARTLESVILLE, OKLAHOMA 74003 TELEPHONE: (918) 336-5272 • FAX: (918) 336-5513

August 05, 2004

U.S. Department of Energy ATTN: Mark\_McKoy 3610 Collins Ferry Road P.O. Box 880 Morgantown, WV 26507-0880

From-us dept of energy

Re: Executive Memo (4/29/1994) Gov to Gov't Relations", and Executive Order 13084; Consultation and Coordination with Indian Tribal Gov't, Section 106 and NAGPRA Consultation for the Environmental Impact Statement (EIS), Western Greenbrier Co-Gen, LLC, Co-Production Facility, Rainette West Virginia

Dear, Mr. McKoy:

Our review indicates that this project is located in an area that was not inhabited by the Delaware Tribe. As such, there is little potential for impacting unknown archaeological sites culturally affiliated with the Delaware Tribe and we have no particular objection to the proposal.

If you have any questions, feet free to contact this office by phone at (918) 336-5272.

Sincerely,

Brice Obermeyer Ph.D.

NAGPRA Director

Delaware Tribe of Indians

Buce Oberney

# **Delaware Nation NAGPRA Office**

P.O. Box 825, Anadarko, OK 73005 Phone: (405) 247-2448 Fax: (405) 247-9898



30 August 2004

ATTN: Mark L. McKoy NEPA Document Manager U.S. Department of Energy National Energy Technology Laboratory 3610 Collins Ferry Road P.O. Box 880 Morgantown, WV 26507-0880

From-us dept of energy

RE: Environmental Impact Statement (EIS), Western Greenbrier Co-Gen, LLC, Co-Production Facility, Rainelle, West Virginia

Dear Mr. McKoy:

Thank you for contacting the Delaware Nation regarding the above referenced project. The Delaware Nation is committed to protecting archaeological sites that are important to tribal heritage, culture, and religion. Furthermore, the tribe is particularly concerned with archaeological sites that may contain human burial remains and associated funerary objects.

As described in your correspondence, the proposed ground disturbing activity of this project does not appear to endanger archaeological sites of interest to the Delaware Nation. Therefore, the Delaware Nation will defer to your State Archaeologist and your state's Office of Historical Preservation regarding the need for archaeological surveys or further investigation. Should either of these agencies recommend an archaeological survey of the proposed construction site, we ask that the Delaware Nation be informed of the results of the survey, including copies of site forms and reports. Also, any changes to the above referenced project should be resubmitted to the NAGPRA Director of the Delaware Nation for review.

Should this project inadvertently uncover an archaeological site, even after an archaeological survey, we request that you immediately contact he appropriate state agencies, as well as the Delaware nation. Also. we ask that you halt all construction and ground disturbing activities until the tribe and these state agencies are consulted.

We appreciate your cooperation in contacting the Delaware Nation. Should you have any questions, feel free to contact me.

Sincerely,

Tamara Francis

NAGPRA/Cultural Preservation Director